

Springdale Fire Department

Policy & Procedures Manual

Volume 2 – Operations

Section 204 – EMS Operations

204.13.5 – Disinfection and Decontamination

This policy addresses and describes decontamination procedures of equipment and clothing. Following these procedures will decrease the risk of cross contamination between equipment, SFD Personnel, and patients. This procedure outlines cleaning and disinfecting procedures for emergency medical equipment that may be contaminated with potentially infectious agents.

It is imperative that SFD Personnel properly clean and disinfect reusable equipment to minimize the possibility of infection during emergency treatment. Cleaning and disinfecting decreases the likelihood of infections by reducing the amount of disease causing organisms from equipment and is deemed adequate by the CDC for semi-critical items.

Cleaning is defined as the removal of all foreign materials from objects. Equipment for invasive procedures that require sterilization (items that will enter tissue or the vascular system or will have blood flow through them) will not be used. In its place the SFD will provide comparable equipment that is single-use only. These items will be disposed of as contaminated waste after each use.

All fire stations shall have a designated decontamination area. This area will be used only for disinfecting contaminated equipment. Cleaning infected equipment in this area will assure isolation of potential infectious agents. Stations will be provided cleaning solutions and necessary cleaning tools.

Transporting Contaminated Equipment

Before transporting contaminated equipment from a scene or hospital to a designated cleaning area, these items shall be placed in a red biohazard bag.

Equipment Disinfecting

Equipment that has been contaminated by blood or OPIM shall be decontaminated through cleaning and disinfecting, or disposed of as contaminated waste. Environmental surfaces that have become soiled with blood or OPIM must be cleaned and disinfected using a one-step germicidal detergent (Vesphene).

Wear gloves and use disposable paper towels to remove gross contaminants. Dispose of the used paper towels as contaminated waste. If using the department approved one-step germicidal detergent (Vesphene), follow the directions on the container for disinfection / decontamination procedures.

Reusable medical equipment must be cleaned with soap and hot water to remove all foreign materials after patient contact. If the equipment is contaminated with a patient's blood or OPIM, it must be decontaminated after use. Decontamination shall be accomplished by spraying a solution of Vesphene. This process will inactivate microorganisms such as HIV, HBV, M. Tuberculosis, et al. Then follow with rinsing with water and drying.

All EMS equipment will be checked daily for cleanliness and readiness. Items that come into contact with patients will be given special attention in order to have them as clean as possible. The following areas will be checked:

- Oxygen/EMS Kits - Bags or boxes shall have all surfaces cleaned with soap and water. Dirt and debris will be removed and contents will be orderly and not overstocked.
- Spine Boards/KED Boards - Clean with soap and water. Follow disinfecting directions listed above.
- Suction Unit - Clean with soap and water to remove blood, food, or other particles. Follow disinfecting directions listed above.
- Monitor - Contaminated cables should be cleaned after each use. Monitor exterior should be cleaned and free from contaminants, dirt, and debris. Carrying case should be cleaned with soap and water.
- Endotracheal Kits - Cleaning of these items will follow directions listed in this section. Particular attention should be given to laryngoscope blades. Handles may be cleaned with soap and water.

Disposable Equipment

Medical equipment identified below that requires sterilization will be disposed of as contaminated waste. The following list includes some of the equipment available that are disposable due to their relatively low cost and difficulty of decontamination required:

- Suction canisters/catheters/tubing.
- Head immobilizer/C-collars.
- Oxygen masks, cannulas, nebulizers, BVM's.
- Cric kits.
- OB kits.
- Gloves, masks, sleeves.
- Intubation tubes, OPA's, NPA's.
- IV catheters, IO catheters, IV tubing, IV fluids.
- Bandaging materials, burn sheets.

Uniform Disinfection

Clothing that has been contaminated with a patient's blood or OPIM needs to be cleaned as follows:

- Contaminated clothing, including turnouts, will be changed as soon as possible and washed in detergent and warm water as recommended by the manufacturer.
- Contaminated uniform clothing will be washed at the fire station. Contaminated uniforms will be placed in a plastic bag to prevent any cross contamination of other uniforms, washed separately, and the washing machine should be rinsed with a cup of bleach after clothing is removed from machine. The department does not recommend the laundering of contaminated clothing at home.
- Uniform Boots or shoes should be scrubbed with soap and hot water to remove contaminants. Wash the soles of footwear after the medical incident or as soon as possible, if contaminated with blood or OPIM.

Hand Washing

The CDC states that "hand washing before and after contact with patients is the single most important means of preventing the spread of infection." Washing your hands after encountering each patient is a must. Use soap and water, or approved waterless hand sanitizer (Citrus II) available on all SFD apparatus and vehicles when other wash facilities are not available.

The SFD recommends that hand washing take a minimum of 30 seconds to properly rid the hands of protein matter, blood, secretions, and other contaminants picked up while handling patients. Vigorous scrubbing is essential. The following is one suggested method to wash hands:

- Wet hands up to 2-3" above wrists.
- Apply hand-cleaning agent. Various agents and soaps are furnished for station use.
- Rub hands vigorously to work up lather.
- Using rotating motion, apply friction to all surfaces of hands and wrists, including backs of hands, between fingers, and around and under nails. Interlace fingers and rub up and down; continue for 15 seconds.
- Holding hands downward, rinse thoroughly, allowing the water to drop off fingertips.
- Repeat procedure, dry hands thoroughly with a paper towel.
- Turn off faucet using a clean paper towel so as not to re-contaminate your hands on the dirty faucet handle.

Hand Sanitizers

The CDC recommends the use of an alcohol based hand rub for decontaminating hands when soap and water hand washing is not available. It is recommended that personnel utilize the approved hand sanitizer and skin protectant, (Citrus II) to kill germs on their skin and to provide additional protection against disease causing germs.

Medical Waste

Medical waste is any waste generated at an EMS scene. Proper disposal depends on whether such waste is contaminated, liquid, solid, or sharp. The purpose of this section is to ensure SFD Personnel can identify hazardous medical waste and deal with it in a safe manner.

Medical waste contaminated (or suspected of contamination) with blood or OPIM shall be treated as infectious waste. Solid contaminated waste shall be placed in a red, biohazard-labeled plastic bag and disposed of into infectious waste containers located in the transporting ambulance or at the receiving hospital.

Disposable equipment shall be disposed of as contaminated waste after patient use. Non-contaminated waste such as packaging for such supplies as IVs, 4x4s, and tubing should be disposed of in any available garbage container.

When sharps containers become full, they shall have the lid properly secured and disposed of at the NMC-S ER.